SEQUENCE LISTING

<110> VLAAMS INTERUNIVERSITAIR INSTITUUT VOOR BIOTECHNOLOGIE VZW

<120> A NOVEL TARGET TO INHIBIT ANGIOGENESIS

<130> VIB-034-PCT

<150> EP02075544.3
<151> 2002-02-08

<150> EP02077742.1
<151> 2002-07-09

<150> EP03100148.0
<151> 2003-01-24

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cct tca tcc aca gat gct cct aag gct tgg aat tat gaa ttg cct gca      151
Pro Ser Ser Thr Asp Ala Pro Lys Ala Trp Asn Tyr Glu Leu Pro Ala
        25                  30                  35

aca aat tat gag acc caa gac tcc cat aaa gct gga ccc att ggc att      199
Thr Asn Tyr Glu Thr Gln Asp Ser His Lys Ala Gly Pro Ile Gly Ile
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ctc ttt gaa cta gtg cat atc ttt ctc tat gtg gta cag ccg cgt gat      247
Leu Phe Glu Leu Val His Ile Phe Leu Tyr Val Val Gln Pro Arg Asp
55                  60                  65                  70

ttc cca gaa gat act ttg aga aaa ttc tta cag aag gca tat gaa tcc      295
Phe Pro Glu Asp Thr Leu Arg Lys Phe Leu Gln Lys Ala Tyr Glu Ser
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aaa att gat tat gac aag cca gaa act gta atc tta ggt cta aag att      343
Lys Ile Asp Tyr Asp Lys Pro Glu Thr Val Ile Leu Gly Leu Lys Ile
            90                  95                  100

gtc tac tat gaa gca ggg att att cta tgc tgt gtc ctg ggg ctg ctg      391
Val Tyr Tyr Glu Ala Gly Ile Ile Leu Cys Cys Val Leu Gly Leu Leu
        105                 110                 115

ttt att att ctg atg cct ctg gtg ggg tat ttc ttt tgt atg tgt cgt      439
Phe Ile Ile Leu Met Pro Leu Val Gly Tyr Phe Phe Cys Met Cys Arg
    120                 125                 130

tgc tgt aac aaa tgt ggt gga gaa atg cac cag cga cag aag gaa aat      487
Cys Cys Asn Lys Cys Gly Gly Glu Met His Gln Arg Gln Lys Glu Asn
135                 140                 145                 150

ggg ccc ttc ctg agg aaa tgc ttt gca atc tcc ctg ttg gtg att tgt      535
Gly Pro Phe Leu Arg Lys Cys Phe Ala Ile Ser Leu Leu Val Ile Cys
                155                 160                 165

ata ata ata agc att ggc atc ttc tat ggt ttt gtg gca aat cac cag      583
Ile Ile Ile Ser Ile Gly Ile Phe Tyr Gly Phe Val Ala Asn His Gln
            170                 175                 180

gta aga acc cgg atc aaa agg agt cgg aaa ctg gca gat agc aat ttc      631
Val Arg Thr Arg Ile Lys Arg Ser Arg Lys Leu Ala Asp Ser Asn Phe
        185                 190                 195

aag gac ttg cga act ctc ttg aat gaa act cca gag caa atc aaa tat      679
Lys Asp Leu Arg Thr Leu Leu Asn Glu Thr Pro Glu Gln Ile Lys Tyr
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ata ttg gcc cag tac aac act acc aag gac aag gcg ttc aca gat ctg      727
Ile Leu Ala Gln Tyr Asn Thr Thr Lys Asp Lys Ala Phe Thr Asp Leu
215                 220                 225                 230

aac agt atc aat tca gtg cta gga ggc gga att ctt gac cga ctg aga      775
Asn Ser Ile Asn Ser Val Leu Gly Gly Gly Ile Leu Asp Arg Leu Arg
                235                 240                 245

ccc aac atc atc cct gtt ctt gat gag att aag tcc atg gca aca gcg      823
Pro Asn Ile Ile Pro Val Leu Asp Glu Ile Lys Ser Met Ala Thr Ala
            250                 255                 260

atc aag gag acc aaa gag gcg ttg gag aac atg aac agc acc ttg aag      871
Ile Lys Glu Thr Lys Glu Ala Leu Glu Asn Met Asn Ser Thr Leu Lys
        265                 270                 275

agc ttg cac caa caa agt aca cag ctt agc agc agt ctg acc agc gtg      919
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Ser Leu His Gln Gln Ser Thr Gln Leu Ser Ser Ser Leu Thr Ser Val
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aaa act agc ctg cgg tca tct ctc aat gac cct ctg tgc ttg gtg cat      967
Lys Thr Ser Leu Arg Ser Ser Leu Asn Asp Pro Leu Cys Leu Val His
295                 300                 305                 310

cca tca agt gaa acc tgc aac agc atc aga ttg tct cta agc cag ctg     1015
Pro Ser Ser Glu Thr Cys Asn Ser Ile Arg Leu Ser Leu Ser Gln Leu
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aat agc aac cct gaa ctg agg cag ctt cca ccc gtg gat gca gaa ctt     1063
Asn Ser Asn Pro Glu Leu Arg Gln Leu Pro Pro Val Asp Ala Glu Leu
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gac aac gtt aat aac gtt ctt agg aca gat ttg gat ggc ctg gtc caa     1111
Asp Asn Val Asn Asn Val Leu Arg Thr Asp Leu Asp Gly Leu Val Gln
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cag ggc tat caa tcc ctt aat gat ata cct gac aga gta caa cgc caa     1159
Gln Gly Tyr Gln Ser Leu Asn Asp Ile Pro Asp Arg Val Gln Arg Gln
    360                 365                 370

acc acg act gtc gta gca ggt atc aaa agg gtc ttg aat tcc att ggt     1207
Thr Thr Thr Val Val Ala Gly Ile Lys Arg Val Leu Asn Ser Ile Gly
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tca gat atc gac aat gta act cag cgt ctt cct att cag gat ata ctc     1255
Ser Asp Ile Asp Asn Val Thr Gln Arg Leu Pro Ile Gln Asp Ile Leu
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tca gca ttc tct gtt tat gtt aat aac act gaa agt tac atc cac aga     1303
Ser Ala Phe Ser Val Tyr Val Asn Asn Thr Glu Ser Tyr Ile His Arg
            410                 415                 420

aat tta cct aca ttg gaa gag tat gat tca tac tgg tgg ctg ggt ggc     1351
Asn Leu Pro Thr Leu Glu Glu Tyr Asp Ser Tyr Trp Trp Leu Gly Gly
        425                 430                 435

ctg gtc atc tgc tct ctg ctg acc ctc atc gtg att ttt tac tac ctg     1399
Leu Val Ile Cys Ser Leu Leu Thr Leu Ile Val Ile Phe Tyr Tyr Leu
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ggc tta ctg tgt ggc gtg tgc ggc tat gac agg cat gcc acc ccg acc     1447
Gly Leu Leu Cys Gly Val Cys Gly Tyr Asp Arg His Ala Thr Pro Thr
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acc cga ggc tgt gtc tcc aac acc gga ggc gtc ttc ctc atg gtt gga     1495
Thr Arg Gly Cys Val Ser Asn Thr Gly Gly Val Phe Leu Met Val Gly
                475                 480                 485

gtt gga tta agt ttc ctc ttt tgc tgg ata ttg atg atc att gtg gtt     1543
Val Gly Leu Ser Phe Leu Phe Cys Trp Ile Leu Met Ile Ile Val Val
            490                 495                 500

ctt acc ttt gtc ttt ggt gca aat gtg gaa aaa ctg atc tgt gaa cct     1591
Leu Thr Phe Val Phe Gly Ala Asn Val Glu Lys Leu Ile Cys Glu Pro
        505                 510                 515

tac acg agc aag gaa tta ttc cgg gtt ttg gat aca ccc tac tta cta     1639
Tyr Thr Ser Lys Glu Leu Phe Arg Val Leu Asp Thr Pro Tyr Leu Leu
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aat gaa gac tgg gaa tac tat ctc tct ggg aag cta ttt aat aaa tca     1687
Asn Glu Asp Trp Glu Tyr Tyr Leu Ser Gly Lys Leu Phe Asn Lys Ser
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aaa atg aag ctc act ttt gaa caa gtt tac agt gac tgc aaa aaa aat     1735
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Lys Met Lys Leu Thr Phe Glu Gln Val Tyr Ser Asp Cys Lys Lys Asn
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Arg Gly Thr Tyr Gly Thr Leu His Leu Gln Asn Ser Phe Asn Ile Ser
            570                 575                 580

gaa cat ctc aac att aat gag cat act gga agc ata agc agt gaa ttg      1831
Glu His Leu Asn Ile Asn Glu His Thr Gly Ser Ile Ser Ser Glu Leu
        585                 590                 595

gaa agt ctg aag gta aat ctt aat atc ttt ctg ttg ggt gca gca gga      1879
Glu Ser Leu Lys Val Asn Leu Asn Ile Phe Leu Leu Gly Ala Ala Gly
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aga aaa aac ctt cag gat ttt gct gct tgt gga ata gac aga atg aat      1927
Arg Lys Asn Leu Gln Asp Phe Ala Ala Cys Gly Ile Asp Arg Met Asn
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tat gac agc tac ttg gct cag act ggt aaa tcc ccc gca gga gtg aat      1975
Tyr Asp Ser Tyr Leu Ala Gln Thr Gly Lys Ser Pro Ala Gly Val Asn
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ctt tta tca ttt gca tat gat cta gaa gca aaa gca aac agt ttg ccc      2023
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cca gga aat ttg agg aac tcc ctg aaa aga gat gca caa act att aaa      2071
Pro Gly Asn Leu Arg Asn Ser Leu Lys Arg Asp Ala Gln Thr Ile Lys
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aca att cac cag caa cga gtc ctt cct ata gaa caa tca ctg agc act      2119
Thr Ile His Gln Gln Arg Val Leu Pro Ile Glu Gln Ser Leu Ser Thr
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cta tac caa agc gtc aag ata ctt caa cgc aca ggg aat gga ttg ttg      2167
Leu Tyr Gln Ser Val Lys Ile Leu Gln Arg Thr Gly Asn Gly Leu Leu
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Glu Arg Val Thr Arg Ile Leu Ala Ser Leu Asp Phe Ala Gln Asn Phe
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atc aca aac aat act tcc tct gtt att att gag gaa act aag aag tat      2263
Ile Thr Asn Asn Thr Ser Ser Val Ile Ile Glu Glu Thr Lys Lys Tyr
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ggg aga aca ata ata gga tat ttt gaa cat tat ctg cag tgg atc gag      2311
Gly Arg Thr Ile Ile Gly Tyr Phe Glu His Tyr Leu Gln Trp Ile Glu
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Phe Ser Ile Ser Glu Lys Val Ala Ser Cys Lys Pro Val Ala Thr Ala
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cta gat act gct gtt gat gtc ttt ctg tgt agc tac att atc gac ccc      2407
Leu Asp Thr Ala Val Asp Val Phe Leu Cys Ser Tyr Ile Ile Asp Pro
775                 780                 785                 790

ttg aat ttg ttt tgg ttt ggc ata gga aaa gct act gta ttt tta ctt      2455
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ccg gct cta att ttt gcg gta aaa ctg gct aag tac tat cgt cga atg      2503
Pro Ala Leu Ile Phe Ala Val Lys Leu Ala Lys Tyr Tyr Arg Arg Met
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840 845 850

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His Asn Pro Val Met Thr Ser Pro Ser Gln His
855 860 865

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35 40 45

Ala Gly Pro Ile Gly Ile Leu Phe Glu Leu Val His Ile Phe Leu Tyr
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Val Val Gln Pro Arg Asp Phe Pro Glu Asp Thr Leu Arg Lys Phe Leu
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Gln Lys Ala Tyr Glu Ser Lys Ile Asp Tyr Asp Lys Pro Glu Thr Val
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Cys Val Leu Gly Leu Leu Phe Ile Ile Leu Met Pro Leu Val Gly Tyr
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Phe Val Ala Asn His Gln Val Arg Thr Arg Ile Lys Arg Ser Arg Lys
180 185 190

Leu Ala Asp Ser Asn Phe Lys Asp Leu Arg Thr Leu Leu Asn Glu Thr
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Ile Leu Asp Arg Leu Arg Pro Asn Ile Ile Pro Val Leu Asp Glu Ile
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Lys Ser Met Ala Thr Ala Ile Lys Glu Thr Lys Glu Ala Leu Glu Asn
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Ser Ser Leu Thr Ser Val Lys Thr Ser Leu Arg Ser Ser Leu Asn Asp
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Asp Arg Val Gln Arg Gln Thr Thr Thr Val Val Ala Gly Ile Lys Arg
370 375 380

Val Leu Asn Ser Ile Gly Ser Asp Ile Asp Asn Val Thr Gln Arg Leu
385 390 395 400

Pro Ile Gln Asp Ile Leu Ser Ala Phe Ser Val Tyr Val Asn Asn Thr
405 410 415

Glu Ser Tyr Ile His Arg Asn Leu Pro Thr Leu Glu Glu Tyr Asp Ser
420 425 430

Tyr Trp Trp Leu Gly Gly Leu Val Ile Cys Ser Leu Leu Thr Leu Ile
435 440 445

Val Ile Phe Tyr Tyr Leu Gly Leu Leu Cys Gly Val Cys Gly Tyr Asp
450 455 460

Arg His Ala Thr Pro Thr Thr Arg Gly Cys Val Ser Asn Thr Gly Gly
465 470 475 480

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Lys Leu Ile Cys Glu Pro Tyr Thr Ser Lys Glu Leu Phe Arg Val Leu
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Ser Ile Ser Ser Glu Leu Glu Ser Leu Lys Val Asn Leu Asn Ile Phe
        595                 600                 605

Leu Leu Gly Ala Ala Gly Arg Lys Asn Leu Gln Asp Phe Ala Ala Cys
    610                 615                 620

Gly Ile Asp Arg Met Asn Tyr Asp Ser Tyr Leu Ala Gln Thr Gly Lys
625                 630                 635                 640

Ser Pro Ala Gly Val Asn Leu Leu Ser Phe Ala Tyr Asp Leu Glu Ala
                645                 650                 655

Lys Ala Asn Ser Leu Pro Pro Gly Asn Leu Arg Asn Ser Leu Lys Arg
            660                 665                 670

Asp Ala Gln Thr Ile Lys Thr Ile His Gln Gln Arg Val Leu Pro Ile
        675                 680                 685

Glu Gln Ser Leu Ser Thr Leu Tyr Gln Ser Val Lys Ile Leu Gln Arg
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Thr Gly Asn Gly Leu Leu Glu Arg Val Thr Arg Ile Leu Ala Ser Leu
705                 710                 715                 720

Asp Phe Ala Gln Asn Phe Ile Thr Asn Asn Thr Ser Ser Val Ile Ile
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Glu Glu Thr Lys Lys Tyr Gly Arg Thr Ile Ile Gly Tyr Phe Glu His
            740                 745                 750

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        755                 760                 765

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    770                 775                 780

Ser Tyr Ile Ile Asp Pro Leu Asn Leu Phe Trp Phe Gly Ile Gly Lys
785                 790                 795                 800

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Asp His Val Tyr Gly Ile His Asn Pro Val Met Thr Ser Pro Ser Gln
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His
865